

Notice of Allowability

Application No.

10/622,230

Examiner

H. T. Le

Applicant(s)

BRINGLEY ET AL

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to ____.
2. ☒ The allowed claim(s) is/are 1-34.
3. ☐ The drawings filed on ____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).


* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date July '03
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date ____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.


H. T. Le
Primary Examiner
Art Unit: 1773

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. The changes are made to correct minor informalities and thus do not affect the scope of the claimed invention.

Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. The application has been amended as follows:

In the specification:

Page 3, line 11, after "desired", "too" has been changed to -- to --.

In the claims:

Claim 32, line 1, "32" has been changed to -- 31 --.

End of Amendment.

REASONS FOR ALLOWANCE

3. The following is an examiner's statement of reasons for allowance: None of the prior art references of record, singly or in combination, teach or suggest a cationic shelled particle comprising a colloidal alumina core having a positive charge, the surface of which is doubly coated with an inner layer of negatively charged particles having median diameter smaller than that of the core and an outer layer having positive charge as required in claims 1-19. In addition, none of the prior art of record teaches or suggest an inkjet recording element containing cationic shelled particles in its image receiving layer wherein the cationic particles comprising a core having a positive charge and is doubly coated with layers of specific charges as mentioned above. The Caruso reference (US 6,479,146), which appears to be the most pertinent reference, teaches multi-layer coated particles comprising a core particle having surface alternately coated with oppositely charged nanoparticles and polyelectrolytes. However, Caruso teaching does not require the core having a positive charge, the inner particle coating having a negative charge and the outer layer having a positive charge as required in the instant claims. It would not have been obvious from the general teaching of Caruso of alternating layers of opposite charges to arrive at the specifically charged core and specifically charged coating layers as required in the instant claims. In addition, the core taught by Caruso functions as a template particle which will be removed to produce a hollow shell.

The Caruso article ("Electrostatic Self-Assembly of Silica Nanoparticle-Polyelectrolyte Multilayers of Polystyrene Latex Particles")* teach a multi-layer coating of opposite electrolytes on a core particle, but the core is a polymer latex which fails to meet the requirement of a colloidal aluminum core in claims 1-19. In addition, the article is not concerned with the positive charge for the core and the outer coating layers, the condition of which is important in inkjet recording medium. Therefore, it would not have been obvious to modify particles as taught by Caruso to make them applicable in inkjet recording medium as required in claims 20-34.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Other references are cited as art of interest.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to H. T. Le whose telephone number is 571-272-1511. The examiner can normally be reached on 10:00 a.m. to 6:30 p.m., Mondays to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on 571-272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

1. * Copy of this article has been provided by Applicants.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



H. T. Le
Primary Examiner
Art Unit 1773